

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A waveform generation method comprising ~~steps of~~:
for a desired target waveform output from a D/A converter,
determining preliminarily an output value and an output timing of the D/A converter
so that a voltage variation amount of the target waveform may be almost constant; and
sequentially
generating the output value from the D/A converter, based on the determined output
value and output timing of the D/A converter.

Claim 2 (Currently Amended): The waveform generation method according to claim
1, further comprising ~~a step of~~:
interpolating between the output values of the D/A converter while a low pass filter is
provided on an output side of the D/A converter.

Claim 3 (Currently Amended): A program for generating a waveform employing
data created in accordance with a procedure of ~~steps~~ (a) to (f) and stored in a time memory
and a waveform memory, wherein

the waveform is output in accordance with a waveform output processing procedure
of ~~steps~~ (g) to (k);

(a) ~~a step of~~ approximating a target waveform v with a plurality of functions $f_1(t)$,
 $f_2(t)$, $f_3(t)$, ..;

(b) ~~a step of~~ calculating inverse functions of the plurality of functions $f_1(t)$, $f_2(t)$,
 $f_3(t)$, ..;

(c) ~~a step of~~ acquiring times $t_1, t_2, t_3, \dots, t_N$ corresponding to output set-up voltage values $V_1, V_2, V_3, \dots, V_n$ of a D/A converter;

(d) ~~a step of~~ replacing the times $t_1, t_2, t_3, \dots, t_N$ with time differences $T_1, T_2, T_3, \dots, T_N$ between a current time and a previous time;

(e) ~~a step of~~ storing the time differences $T_1, T_2, T_3, \dots, T_N$ in the time memory, wherein an initial value T_0 of the time difference is zero and stored at an address value 0000;

(f) ~~a step of~~ storing the output set-up voltage values V_1, V_2, V_3, \dots in the waveform memory, wherein an initial value V_0 of the waveform memory is stored at an address value 0000;

(g) ~~a step of~~ substituting an initial value of zero for a loop variable n ;

(h) ~~a step of~~ reading a n -th time data T_n from the time memory and setting the time data T_n in a predetermined timer;

(i) ~~a step of~~ initiating and counting the timer;

(j) ~~a step of~~ accepting a count end notification from the timer, reading a n -th waveform data from the waveform memory, and setting the output set-up voltage value V_n in the D/A converter; and

(k) ~~a step of~~ determining a completion status of a waveform output process by confirming the loop variable n , and repeating a series of processing from step (h) to step (j) by counting up the loop variable n until completion.

Claim 4 (Original): A waveform generation circuit comprising:

a time memory for storing an output time interval of waveform output values preset discretely based on a desired target waveform;

a timing controller for setting up a timing at which a D/A conversion of the waveform output values is performed, based on the output time interval stored in the time memory; and

a D/A converter for performing the D/A conversion of the waveform output values according to the timing set up in the timing controller.

Claim 5 (Original): The waveform generation circuit according to claim 4, further comprising:

a low pass filter for interpolating between output values of the D/A converter.

Claim 6 (Currently Amended): A radar apparatus comprising:

the waveform generation circuit according to claim ~~4 or 5~~ as a modulation circuit for modulating the oscillation frequency of an oscillator.

Claim 7 (New): A radar apparatus comprising:

the waveform generation circuit according to claim 5 as a modulation circuit for modulating the oscillation frequency of an oscillator.